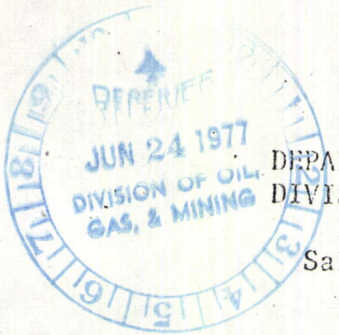
MINING APPLICATION NO. ACT/041/009

Date _____



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS
(See Rule M of General Rules and Regulations)

1. Name of Applicant or Company Georgia-Pacific Corporation
   Corporation (x) Partnership ( ) Individual ( )
2. Home Office 900 S. W. Fifth Avenue, Portland, Oregon 97204
3. Name and title of person representing company Mr. C. F. Hummel
4. Address P. O. Box 68, Sigurd, Utah 84657 Office Phone 801-896-5406
5. Location of Operation Sevier County, as detailed in Exhbit "A" (Attached as Pages 3 & 4)
6. Name of Mine Georgia-Pacific gypsum quarries
7. Mineral to be mined:

( )	Coal	( )	Flagstone	Mining method:
( )	Copper	( )	Gravel	Open-Pit Quarry
( )	Manganese	( )	Shale	
( )	Iron Ore	( )	Uranium	
( )	Phosphate	( )	Gilsonite	
( )	Potash	( )	Bituminous Sandstone	
( )	Fluorspar	( )	Tungsten	
( )	Other (specify) Gypsum			

8. Have you or any person, partnership or corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?
   ( ) Yes (x) No
   If yes, list all approval numbers now under surety:

9. Owner/Owners of record of the surface area within the land to be affected:

United States Gypsum Company	Address	101 South Wacker Drive Chicago, Illinois 60606
King's Meadow Ranches, Inc.	Address	c/o Mr. DeReece Dastrup Sigurd, Utah 84657
American Gypsum Trust	Address	c/o Mr. John R. Ritter 3817 Ashland Drive Salt Lake City, Utah 84109
	Address	

10. Owner/Owners of record of minerals to be mined:

Georgia-Pacific Corporation Address (Applicant)

_____ Address _____

_____ Address _____

_____ Address _____

11. Owner/Owners of record of all other minerals within any part of the land affected:

United States Gypsum Company Address As above

American Gypsum Trust Address As above

_____ Address _____

11a. Have the above owners been notified in writing? Please see Page 4 (Exhibit "A")
( ) Yes ( ) No

12. Source of Operator's legal right to enter and conduct operations on land to be covered by the Notice Patented and unpatented mining claims and agreements per Exhibit "A".

13. Approximate acreage to be disturbed: 304 acres

Mining Operation Area: (include operations, storage, & disposal area)	119	acres +
Access Road or Haulageway:	33	acres +
Drainage System: Say	152	acres =
Total Acres:	304	Acres

14. Give the names and post office addresses of every principal Executive, Officer Partner, (or person performing a similar function) of Applicant:

	Name:	Title:	Address:
a.	Robert E. Floweree - Chmn. & T. Marshall Hahn, Jr.	Chief Exec. Officer President	900 S.W. 5th Ave., Portland, OR 97204 "
b.	Harold E. Sand	Executive Vice Pres.	"
c.	Glenn E. Wilson	Vice President, Gypsum Div.	"
d.	T. W. Richards	Gypsum Operations Manager	14030 S. W. 72nd Avenue Tigard, Oregon 97223

15. Has Applicant, any subsidiary or affiliate or any person, partnership, association, trust, or corporation controlled by or under common control with Applicant, or any person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? ( ) Yes (x) No

If yes; explain:

EXHIBIT "A"

Re MR Form 1 - Question 5 - Mining Application No.

Georgia-Pacific Corporation

Sigurd, Sevier County, Utah

LOCATION OF OPERATIONS

The on-site property is comprised of certain fee simple lands, unpatented mining claims and patented mining claims owned or leased by the applicant, as shown by various colors on Exhibit "B" (Sigurd Area Gypsum Properties, Drawing D-46-M-296) as follows:

	Color Code
* Patented Mining Claims - Leased by Applicant	Orange
Patented Mining Claims - Owned by Applicant	Red
Unpatented Mining Claims - Held by Applicant	Brown
Fee simple plant site - Owned by Applicant	Green

The description of the on-site lands and the respective interests of the applicant therein are as listed next hereunder.

Township and Range				Acres			
				Patented Claims Leased* by Applicant	Owned by Applicant		
					Mining Claims		Fee
T.	R.	Section		by Applicant	Patented	Unpatented	Simple
22S	1W	12	E/2 NE/4 NE/4		20		
			N/2 NW/4 NE/4		20		
			SW/4 NE/4		40		
			NW/4		160		
			SW/4		160		
			NE/4 SE/4		40		
			SW/4 NW/4 SE/4		10		
			SW/4 SE/4		40		
		13	N/2 NE/4 NW/4		20		
			N/2 NW/4 NW/4		20		
		21	SE/4 NE/4		40		
			S/2 SE/4 SW/4	20			
			NE/4 SE/4		40		
			NE/4 NW/4 SE/4		10		
			S/2 NW/4 SE/4		20		
			S/2 SE/4	80			
		22	Lots 15, 16, 17		60		
			E/2 SW/4		80		
			S/20 A of Lot 11	20			
		27	N/2; SW/4; W/2 SE/4	560			

* Leased from American Gypsum Trust - Salt Lake City, Utah. (See next page re status)

EXHIBIT "A"

Township and Range T	R	Section		Acres: Patented Claims Leased* by Applicant	Owned by Applicant: Mining Claims Patented	Mining Claims Unpatented	Fee Simple
22S	1W	28	Lots 1 to 3, incl.	37.77			
			Lots 5 to 12, incl.	320			
			SE/4	160			
		33	NE/4; E/2 NW/4; SE/4	400			
		34	W/2	320			
23S	1W	4	Lots 2, 3 and 4	44.79			
		5	N20A of Lot 1	20			
			N/2 Lot 2	21.55			
			NW/4	160			
			S/2 NE/4			80	
			N/2 SE/4			80	
		8	E/2 SW/4			80	
			NE/4 SW/4 SW/4**			10	
			S/2 NW/4 SE/4			20	
			SW/4 SE/4			40	
			N/2 SE/4 SE/4			20	
23S	2W	1	Part of E/2 - Plant Site				28.88
		***	Total On-Site Area	2164.11	780	330	28.88

*
Leased from American Gypsum Trust, Salt Lake City, Utah. The validity of this lease agreement with American Gypsum Trust is in dispute. Georgia-Pacific Corporation completed gypsum quarrying in this leasehold property in 1975 and now uses and maintains certain roads therein for access to its other mining claims.

**
Ownership (exclusive of mineral and mining rights) is vested in King's Meadow Ranches, Inc. whom we have notified in writing.

***
Additionally, the applicant will be constructing, using and maintaining a haul road over adjoining lands of United States Gypsum Company in Sections 14 and 15, T22S,R1W, as shown on Exhibit "B". These lands will otherwise be affected by the continuing gypsum quarrying operations of that company. The applicant's right to construct and use the haul road therein is pursuant to a written agreement of November 27, 1967.

STATE OF Oregon

COUNTY OF Multnomah

I, E. J. Cole, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: E J Cole

E. J. Cole, Chief Mining Engineer

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 22nd day of June, 19 77.

Notary Public Christine M. Wilkins

My Commission Expires: 02-22-80

MINING APPLICATION
NO. _____
Date _____

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1558 West North Temple
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN
(Other forms may be used in lieu of MR 2, provided they contain the same information)

1. Name of Applicant or Company - Georgia-Pacific Corporation

2. Proposed Type of Operation - Continuation of gypsum quarrying

3. (a) Prior Land Use(s) - None, except for occasional grazing by sheep and wildlife in the limited areas of higher density vegetation.

   (b) Current Land Use(s) - Ditto - plus gypsum quarrying operations.

   (c) Possible or Prospective Future Land Use(s) - As in 3(a) above.

4. What vegetation exists on the land proposed to be affected - Sparse growth of trees, shrubs and grasses characteristic of the arid climate and the rugged and rocky terrain.

   Types and Estimated Percent Cover or Density - The percent of total vegetative cover is estimated to be less than 5% and is comprised primarily of cedar, pine, sagebrush, saltbush, yellowbrush, bitter brush and Indian rice grass.

5. What is the range pH of soil before mining? 8 pH.
   Name of Person or Agency and method of determining pH - Soil Conservation Service - Colorimetric method.

6. Site Elevation above sea level - 5600 ft. ±

7. In case of coal, oil shale, and bituminous sandstone: Principal seam(s) and thickness(es) Not applicable

8. Estimated duration of mining operations - 20 years

9. Has overburden waste or rejected materials been classified as acid or alkali producing? - No.
   Does the above material being moved have any other characteristics affecting revegetation? No.

10. Will any underground workings or aquifers be encountered? No.

    Is there an active discharge of water from abandoned deep mines on or crossing the land affected? No.

11. Topography, Geology, Rock and Soil Characteristics

As is evident in the various drawing exhibits, much of the affected area shows considerable relief, the gypsum generally outcropping on the top or otherwise lying on one flank of hogbacks, ridges and hills.

The gypsum occurs in the middle part of the Arapien shale formation of Jurassic age. The rock strata are complexly faulted and folded in "en echelon" folds that trend to the north-northeast.

Country rock in the affected area is mostly comprised of calcareous grey and red siltstones and shales. Surficial materials, other than gypsum, are mostly shale and siltsone fragments, clay and gypsite, the weathered products of the rock strata.

12. Vegetation and Re-vegetation

Because of the nature of this surficial material, the rugged topography, and the semi-arid climate (average annual precipitation of 8-1/2 inches), the affected land is mostly barren with but a sparse growth of vegetation.

In areas where surficial materials were disturbed through the years by previous gypsum quarry site and access road preparation work, there now appears to be more native vegetation than previously existed. This is believed to be due to the comminution and degradation of the fragmented shales and mudstones by the tractor-dozers and the resultant increase in the clay-like content of the surface material.

To promote more such growth in areas of future operations, we plan to do more re-grading of such disturbed materials on the flatter terrain and more gentle slopes where tractor-dozers can be safely used and to work cooperatively with the local Soil Conservation Service in an effort to accelerate vegetative growth, if possible, by reseeding.

13. Mining Methods and Sequence

As the gypsum deposits outcrop at the top or along the flank of ridges and hills, quarrying is started at the top by mining a "bench" (having a face heighth of not more than 20 feet) along the width and length of the deposit. Successive 20 foot benches are similarly quarried until excessive anhydrite or other deleterious minerals are encountered that render the rock unusable or until the quarry "bottoms" in clay, siltstone or shale, as sometimes occurs.

To develop such a quarry, a haul road is first constructed to the deposit, from which a temporary "drill road" is bulldozed to the top of the gypsum. Vertical blastholes, not exceeding 20 feet in depth, are drilled from the top of the deposit and blasted. The broken rock is then loaded into the quarry trucks by a front end loader and hauled to the plant site for stockpiling and subsequent processing.

All such mining operations, including road construction and site preparation will continue to be conducted in accordance with applicable codes

and regulations, with particular emphasis on the safety of personnel and the proper maintenance of the equipment.

14. Access Roads

Access roads are constructed where necessary by a tractor-dozer. In the flatter terrain of the area, most roads were constructed years ago as mining claim assessment work or as access roads to former quarry sites. As and when it is necessary to haul over these roads, some regrading and improvement will be required in certain areas, as indicated on the pertinent exhibits. In and near the gypsum areas, that are characterized by more topographic relief, new access roads will be constructed (in many places along pre-existing "jeep roads") up valleys and hillsides to the higher ground levels where quarrying is to be done.

Because of the nature of the surficial materials along the route of these roads, a sub-grade of such materials is generally sufficient for haulage purposes, although a top dressing or final grading of shale is used in places for added durability.

The profiles and cross-sections of these roads vary widely depending upon the terrain. Road widths will approximate 35 feet and because of the semi-arid climate can be constructed in the flatter or more gently sloping areas by simply grading with a tractor-dozer. Where roads must be constructed up the steeper hills, it is usually done by a sidehill cut and fill method in which a tractor-dozer cuts a notch along the hillside and sidecasts the spoil to the low side. Road gradients vary widely according to the terrain.

15. Site Preparation

Site preparation primarily consists of constructing the road to the top of the gypsum bed to permit access of the drill and haul roads to the quarry benches, as they are developed. Where any surface veneer of gypsite or other material needs to be first removed to maintain required rock purity, it is pushed aside by a tractor-dozer. Where practical, such material will be pushed onto flat or gently sloping terrain where it can be graded and seeded. The trees and shrubs in such areas, in addition to being sparse, are generally that small that they are decimated by the tractor-dozer and mixed with the spoil.

16. Removal and Stockpiling of Surficial Materials

This will be done as mentioned in Item 13, above.

17. Placement or Containment of Disturbed Materials

Where practical, all disturbed materials will be retained on level or gently sloping terrain where they can be re-graded and seeded. When operating along the peaks of ridges or on the flank of hogback type hills, (where the quarry floor that is to be worked downward in descending horizontal benches cannot be encumbered with surficial materials), such materials are pushed onto the almost barren slopes of the hillsides. In such areas, gypsum "fly-rock" from blasting and "spillage" of gypsum rock over the hillside edge of the quarry benches sometimes results in the deposition of

gypsum fragments and boulders on hillsides that are too steep to permit reclaim of such material by mobile equipment. In the past, where such gypsum material could be reached at or near the foot of slopes by dozing a temporary road to the foothill area, it was reclaimed to maximize recovery of the rock. Although presently indeterminate, there may prove to be some locations where such foothill recovery of gypsum rock may be required in future.

No known acid, alkali-producing or toxic materials are present in the area to be affected.

18. Stabilization of Disturbed Materials

All grading of disturbed materials will be done in a manner that will provide stability prior to any seeding of the area.

GRADING AND REGRADING

19. (a) Typical Cross-Section of Regrading

Because of the greatly varying physiography of the area to be affected, and because of the varying modes of occurrence of the gypsum deposits, there is no typical cross-section of regrading. Additionally it is generally not known, when mining of a deposit is initiated, how many benches can be mined before encountering excessive impurities or country rock.

(b) Spreading of Surficial Materials

Disturbed surficial material on the more gentle slopes and flat terrain will be regraded by a tractor-dozer. The removal of such material will be kept to a minimum and will be spread in thickness of one foot or more.

(c) No soil treatment is contemplated but if experience proves that re-vegetation is materially aided by the use of fertilizer, it will be used.

(d) Because of the minor amount of precipitation in the area, no particular drainage control has been required through the years in our Sevier County gypsum quarry areas. The quarry areas show much relief before quarrying is done and the amount of run off and drainage patterns are not materially changed by the quarry operations.

(e) Dump and road fill slopes will not exceed 50^{o}. Elsewhere an effort will be made to not exceed the maximum natural slopes of the original or adjacent terrain.

TESTING

20. (a) Stability of Reclamation Fill Material

The stability of the reclamation fill material is known from many years of quarrying in the area.

(b) Soil Testing

It is planned to work cooperatively with the Soil Conservation Service in an effort to determine the practicality and optimum methods of revegetating those affected areas where sufficient clay occurs with the rocky surface materials to support some vegetation. The pH and other characteristics of the surficial mix will be checked as part of any such program.

No revegetation has been attempted to date. In consideration of the climactic, topographic, and soil conditions in the areas to be affected, it is not certain that revegetation will prove advantageous or warranted, but an on-going program of re-vegetation will be attempted and, if successful, continued as an integral part of the operation.

(c) Soil Treatment

As indicated in 19(c), above, soil treatment will be used if required and we would anticipate that it would be such as recommended by the Soil Conservation Service and found beneficial.

(d) Surface Preparation of Areas Intended to Support Vegetation

Such areas will be scarified, if necessary, and properly graded prior to revegetation.

REVEGETATION

21. (a) Revegetation will be done by conventional or rangeland drilling.

(b) It is not expected that mulch will be used.

(c) Revegetation Plan and Schedule

As can be seen from the Exhibits, affected areas will be facing all directions.

Seeding will be done during the Fall months.

The species of seeds and the rates of application will depend upon the results achieved. It is expected that initial reseeding programs will include test plots of the following plantings:

Species	Rate/Acre
Four Wing Salt Bush	6 lbs.
Siberian Wheat Grass	8 lbs.
Indian Rice (if available)	10 lbs.
Bitter Brush	4 lbs.

Regrading and revegetation will be done concurrently with quarry operations and will be completed within one year after completion of quarrying of a deposit.

(d) Little grazing is done in the area. If it presents any problems, attempts will be made to minimize it as long as necessary.

(e) No irrigation will be used.

(f) If revegetation proves practical, reseeding will be done as necessary to achieve proper results.

I, the undersigned Operator, hereby submit this to be my Reclamation and Mining Plan for the area shown on the attached map. I further understand that the operation will be conducted in accordance with the Mined Land Reclamation Act of 1975, and all rules and regulations currently in effect thereunder.

Signed E.J. Cole Operator Date 22 June 1977
E. J. Cole, Chief Mining Engineer

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 22nd day of June, 1977.

Notary Public Christine M. Wilkins

My Commission Expires: 02-22-80

NOTICE OF INTENTION AND
MINING AND RECLAMATION PLAN
JUNE 22, 1977
GEORGIA-PACIFIC CORPORATION
Re Parts Of:

Sections	T	R
12,13,21,22,27,28,33, and 34	22S	1W
4, 5 and 8	23S	1W
1 (Plant Site)	23S	2W